

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF MASSACHUSETTS**

SINGULAR COMPUTING LLC,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

C.A. No. 1:19-cv-12551 FDS

**GOOGLE LLC'S ANSWER AND AFFIRMATIVE DEFENSES TO  
PLAINTIFF SINGULAR COMPUTING LLC'S AMENDED COMPLAINT**

Defendant Google LLC, by and through counsel, submits its Answer to Plaintiff Singular Computing LLC's ("Singular") Amended Complaint ("Complaint"), as follows:

**THE PARTIES**

1. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations this paragraph, and therefore denies them.
2. Google admits that Google LLC is a Delaware limited liability company with a principal place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043. Google admits that more than 1,500 employees work in its Cambridge, Massachusetts office and that its registered agent in Massachusetts is Corporation Service Company, 84 State Street, Boston, MA 02109. Google denies any remaining allegations of this paragraph.

## **JURISDICTION**

3. Google admits that this action invokes the United States patent laws, and that this Court has subject matter jurisdiction over patent law claims. Google denies any remaining allegations of this paragraph.

4. Solely for the purpose of this action, Google does not contest personal jurisdiction in this District. Google specifically denies that it has committed any acts of infringement within the District of Massachusetts, or any other District. Google denies any remaining allegations of this paragraph.

5. Google admits that venue is proper in the District of Massachusetts for purposes of this particular action but not convenient or in the interests of justice under 28 U.S.C. 1404(a). Google denies any remaining allegations of this paragraph.

## **FACTUAL BACKGROUND**

6. Google is without knowledge or information sufficient to form a belief as to the truth of the factual allegations of this paragraph, and on that basis denies them.

7. Google admits that Sergey Brin is an alumnus of Johns Hopkins Center for Talented Youth (“CTY”). Google is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of this paragraph, and on that basis denies them.

8. Google is without knowledge or information sufficient to form a belief as to the truth of the factual allegations of this paragraph, and on that basis denies them.

9. Google is without knowledge or information sufficient to form a belief as to the truth of the factual allegations of this paragraph, and on that basis denies them. This paragraph also includes argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations.

10. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph, and therefore denies them. This paragraph also includes argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations.

11. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph, and therefore denies them. This paragraph also includes argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations.

12. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph, and therefore denies them.

13. Google admits that patent application No. 61/218,691, on its face, bears the title quoted in this paragraph and was filed in June 2009. Google denies any remaining allegations in this paragraph.

14. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph, and therefore denies them.

15. Google admits that products such as Translate, Photos, Search, Assistant, and Gmail have become more popular over time. Google denies any remaining allegations in this paragraph.

16. Google denies the allegations of this paragraph, including without limitation the claim of willfulness.

17. Google admits the allegations of this paragraph.

18. Google admits that Dr. Bates met with Google employees at least three times prior to early 2017. Google denies the remaining allegations of this paragraph.

19. Google admits that Dr. Bates discussed computing theory with certain Google employees. Google is without knowledge or information sufficient to form a belief as to the meaning of “such” in this paragraph, and therefore denies any related allegation in this paragraph. On information and belief, Dr. Bates never advised Google of any particular patents. Google denies any remaining allegations of this paragraph.

20. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

21. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

22. Google denies the allegations of this paragraph.

23. Google denies the allegations of this paragraph.

24. Google admits that, as of 2017, it had at least eight data centers in the United States. Google denies any remaining allegations in this paragraph.

25. Google admits that it uses some TPU devices to support some Google products. Google admits that Google’s parent company, Alphabet Inc., reported worldwide net income of approximately \$34 billion in 2019. Google denies any remaining allegations in this paragraph.

26. Google admits that it currently operates data centers in Berkeley County, South Carolina; Council Bluffs, Iowa; The Dalles, Oregon; Douglas County, Georgia; Henderson, Nevada; Jackson County, Alabama; Lenoir, North Carolina; Loudoun County, Virginia; Mayes County, Oklahoma; and Montgomery County, Tennessee. Google denies that TPUs and

TPUv3 devices are in operation at each of these data centers. Google denies any remaining allegations in this paragraph.

### **THE PATENTS-IN-SUIT**

27. Google admits that United States Patent No. 8,407,273 (“the ’273 Patent”), on its face, bears the title quoted in this paragraph and an issuance date of March 26, 2013. Google admits that United States Patent No. 9,218,156 (“the ’156 Patent”), on its face, bears the title quoted in this paragraph and an issuance date of December 22, 2015. Google admits that United States Patent No. 10,416,961 (“the ’961 Patent”), on its face, bears the title quoted in this paragraph and an issuance date of September 17, 2019. Google denies that the ’273 Patent, the ’156 Patent, or the ’961 Patent were duly and legally issued. Google denies any remaining allegations of this paragraph.

28. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph, and therefore denies them.

29. Google admits that provisional application No. 61/218,691, on its face, was dated June 19, 2009. Google is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations in this paragraph, and therefore denies them.

### **PATENT ELIGIBILITY – CLAIMED ADVANCE OF REPRESENTATIVE CLAIMS**

30. Google denies the allegations of this paragraph.

#### **’273 Patent – Representative Claim 53**

31. Google admits that Claim 53 of the ’273 patent, on its face, contains the language quoted in this paragraph. Google denies any remaining allegations of this paragraph.

32. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

33. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

34. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

35. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

36. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

37. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

38. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

39. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

40. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

41. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

42. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

43. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

44. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

45. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

46. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

**'156 Patent – Representative Claim 7**

47. Google admits that Claim 7 of the '156 patent, on its face, contains the language quoted in this paragraph. Google denies any remaining allegations of this paragraph.

48. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

49. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

50. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

51. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

52. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

53. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

54. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

55. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

56. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

57. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

58. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

59. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

60. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

61. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

62. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

63. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

#### **'961 Patent – Representative Claim 4**

64. Google admits that Claim 4 of the '961 patent, on its face, contains the language quoted in this paragraph. Google denies any remaining allegations of this paragraph.

65. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

66. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

67. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

68. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

69. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

70. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

71. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

72. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

73. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

74. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

75. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

76. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

77. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

78. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

79. This paragraph sets forth argument and legal conclusions to which no response is required. To the extent this paragraph includes any allegations to which a response is required, Google denies them.

80. Google denies the allegations of this paragraph.

**COUNT I (GOOGLE'S INFRINGEMENT OF U.S. PATENT NO. 8,407,273)**

81. Google incorporates by reference its responses to the allegations of paragraphs 1 to 80 above as its response to this paragraph.

82. Google admits that the '273 patent, on its face, contains the statement that “today’s CPU chips make inefficient use of their transistors.” Google denies any additional allegations of this paragraph.

83. Google admits that the '273 patent, on its face, refers to “LPHDR execution unit[s].” This paragraph also includes argument and legal conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

84. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

85. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

86. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

87. Google admits that the language quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

88. Google admits that Claim 53 of the '273 patent, on its face, contains the language quoted in this paragraph. Google denies any remaining allegations of this paragraph.

89. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

90. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. The term arithmetic logic (ALU) unit is not defined and thus vague, and Google denies all allegations referencing ALUs on that basis and Google further denies those allegations to the extent they incorporate a legal conclusion about what constitutes an ALU. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

91. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. The term arithmetic logic (ALU) unit is not defined and thus vague, and Google denies all allegations referencing ALUs on that basis and Google further denies those allegations to the extent they incorporate a legal conclusion about what constitutes an ALU. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

92. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

93. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies that the Wikipedia entry for Single-precision floating-point format, reproduced in this paragraph, was originally

“published by Google.” Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

94. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph regarding “Singular test results,” and therefore denies them. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

95. Upon information and belief, Google denies that it “published” the image titled “TPUv2 Block Diagram.” Google admits that the remaining language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google admits that Dr. David Patterson presented a lecture at the MIT Computer Science and Artificial Intelligence lab on October 16, 2019. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

96. Google admits that the language quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

97. Google denies the allegations of this paragraph.

#### **COUNT II (GOOGLE’S INFRINGEMENT OF U.S. PATENT NO. 9,218,156)**

98. Google incorporates by reference its responses to the allegations of paragraphs 1 to 97 above as its response to this paragraph.

99. Google admits that the '156 patent, on its face, contains the statement that "today's CPU chips make inefficient use of their transistors." Google denies any additional allegations of this paragraph.

100. Google admits that the '156 patent, on its face, refers to "LPHDR execution unit[s]." This paragraph also includes argument and legal conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

101. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

102. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

103. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

104. Google admits that the language quoted in this paragraph as being "published by Google" appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

105. Google admits that Claim 7 of the '156 patent, on its face, contains the language quoted in this paragraph. Google denies any remaining allegations of this paragraph.

106. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

107. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. The term arithmetic logic (ALU) unit is not defined and thus vague, and Google denies all allegations referencing ALUs on that basis and Google further denies those allegations to the extent they incorporate a legal conclusion about what constitutes an ALU. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

108. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. The term arithmetic logic (ALU) unit is not defined and thus vague, and Google denies all allegations referencing ALUs on that basis and Google further denies those allegations to the extent they incorporate a legal conclusion about what constitutes an ALU. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

109. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

110. Google denies that the Wikipedia entry for Single-precision floating-point format, reproduced in this paragraph, was “published by Google.” Google admits that the remaining language and images quoted in this paragraph as being “published by Google” appeared on a

Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

111. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. The term “float32 format” is not defined and thus vague, and Google denies all allegations referencing float32 format on that basis. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph regarding “Singular test results,” and therefore denies them. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

112. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on Google websites. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

113. Google admits that each TPUv2 has 8 MXUs and each TPUv3 has 16 MXUs. Google admits that Dr. David Patterson presented a lecture at the MIT Computer Science and Artificial Intelligence lab on October 16, 2019. Upon information and belief, Google denies that it “published” the image titled “TPUv2 Block Diagram.” Google admits that the remaining language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

114. Google admits that the language reproduced in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this

paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

115. Google denies the allegations of this paragraph.

**COUNT III (GOOGLE'S INFRINGEMENT OF U.S. PATENT NO. 10,416,961)**

116. Google incorporates by reference its responses to the allegations of paragraphs 1 to 115 above as its response to this paragraph.

117. Google admits that the '961 patent, on its face, contains the statement that "today's CPU chips make inefficient use of their transistors." Google denies any additional allegations of this paragraph.

118. Google admits that the '961 patent, on its face, refers to "LPHDR execution unit[s]." This paragraph also includes argument and legal conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

119. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

120. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

121. This paragraph contains argument and conclusions to which no response is required, but to the extent a response is required, Google denies the allegations. Google denies any additional allegations of this paragraph.

122. Google admits that the language quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

123. Google admits that Claim 4 of the ’961 patent, on its face, contains the language quoted in this paragraph. Google denies any remaining allegations of this paragraph.

124. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

125. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. The term arithmetic logic (ALU) unit is not defined and thus vague, and Google denies all allegations referencing ALUs on that basis and Google further denies those allegations to the extent they incorporate a legal conclusion about what constitutes an ALU. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

126. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. The term arithmetic logic (ALU) unit is not defined and thus vague, and Google denies all allegations referencing ALUs on that basis and Google further denies those allegations to the extent they incorporate a legal conclusion about what constitutes an ALU. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

127. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

128. Google denies that the Wikipedia entry for Single-precision floating-point format, reproduced in this paragraph, was “published by Google.” Google admits that the remaining language and images quoted in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

129. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on a Google website. The term “float32 format” is not defined and thus vague, and Google denies all allegations referencing float32 format on that basis. Google is without knowledge or information sufficient to form a belief as to the truth of the allegations of this paragraph regarding “Singular test results,” and therefore denies them. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

130. Google admits that the language and images quoted in this paragraph as being “published by Google” appeared on Google websites. Google denies the remaining allegations in this paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

131. Google admits that the language reproduced in this paragraph as being “published by Google” appeared on a Google website. Google denies the remaining allegations in this

paragraph as they relate to Google, and specifically denies that it has committed any acts of infringement.

132. Google denies the allegations of this paragraph.

### **PRAYER FOR RELIEF**

These paragraphs set forth the statement of relief requested by Singular to which no response is required. Google denies any allegations contained in the Prayer for Relief to which a response is required, including without limitation the claim of willfulness.

Google denies each and every allegation of Singular's complaint not specifically admitted or otherwise responded to above. Google specifically denies that it has infringed or is liable for infringement of any valid and enforceable patent claims of Singular. Google further specifically denies that Singular is entitled to any relief whatsoever of any kind against Google as a result of any act of Google or any person or entity acting on behalf of Google.

### **DEMAND FOR JURY TRIAL**

Singular's demand for a trial by jury for all counts of the complaint does not state any allegation, and Google is not required to respond. To the extent that any allegations are included in the demand, Google denies these allegations.

### **GOOGLE'S AFFIRMATIVE DEFENSES**

Google asserts the following affirmative defenses. To the extent any of the defenses, in whole or in part, relates to or negates an element of Singular's claims, Google in no way seeks to relieve Singular of its burden of proof or persuasion on that element. All defenses are pled in the alternative and do not constitute an admission of liability or that Singular is entitled to any relief whatsoever. Google reserves any and all rights it has under the Federal Rules of Civil Procedure

to assert additional defenses and/or counterclaims as additional facts are learned or present themselves during discovery or otherwise during the course of these proceedings.

**First Affirmative Defense – Invalidity and/or Non-Patentability (All Counts)**

The claims of the Patents-in-Suit are invalid and unenforceable for failure to satisfy one or more of the requirements of Title 35 of the United States Code, including without limitation 35 U.S.C. §§ 101, 102, 103, and 112, because the claims are directed to abstract ideas or other non-statutory subject matter, because the claims lack novelty, and are taught and suggested by the prior art, because the claims are obvious in view of the prior art, and because the claims suffer from a failure of written description, lack of enablement, and claim indefiniteness.

**Second Affirmative Defense – Estoppel (All Counts)**

Plaintiff's claims are barred, in whole or in part, by the doctrines of equitable estoppel and/or prosecution history estoppel.

**Third Affirmative Defense – Laches (All Counts)**

The relief sought by Singular is barred, in whole or in part, by the equitable doctrine of laches.

**Fourth Affirmative Defense – Substantial Non-Infringing Uses (All Counts)**

Any and all products or actions accused of infringement by Singular have substantial uses that do not infringe and do not induce or contribute to the alleged infringement of the claims of the Patents-in-Suit.

**Fifth Affirmative Defense – Limitation on Patent Damages (All Counts)**

Singular's claim for damages, if any, against Google for alleged infringement of the Patents-in-Suit are limited by 35 U.S.C. §§ 286, 287 and/or 288, and by the territorial limits of the United States patent laws.

**Sixth Affirmative Defense – Equitable Relief Unavailable (All Counts)**

Singular is barred from obtaining any equitable relief from Google because any alleged injury to Singular is neither immediate or irreparable, Singular has an adequate remedy at law, and granting equitable relief would not be in the public interest.

**Seventh Affirmative Defense – Damages Speculative, Uncertain, and Contingent (All Counts)**

Singular's alleged damages are speculative, uncertain and/or contingent, have not accrued, and are not recoverable.

**Eighth Affirmative Defense – No Injury (All Counts)**

Singular's claims are barred, in whole or in part, because Singular has not suffered any injury in fact from the conduct alleged in the Complaint.

**Ninth Affirmative Defense – No Causation (All Counts)**

Google's conduct was and is neither the cause in fact nor the proximate cause of any injury, loss, or damage alleged by Singular.

**Tenth Affirmative Defense - 28 U.S.C. § 1498 (All Counts)**

To the extent Plaintiffs' allegations of infringement include any method, system, apparatus and/or product used by or manufactured by or for the United States, Plaintiffs' claim for damages for alleged infringement is limited and/or barred by 28 U.S.C. § 1498.

**EXCEPTIONAL CASE**

On information and belief, this is an exceptional case entitling Google to an award of its attorneys' fees incurred in connection with defending this action pursuant to 35 U.S.C. § 285, as a result of, inter alia, Plaintiff's assertion of the Patents-in-Suit against Google with the knowledge that Google does not infringe any valid or enforceable claim of the Patents-in-Suit and/or that the Patents-in-Suit are invalid and/or unenforceable.

**PRAYER FOR RELIEF**

WHEREFORE, Google respectfully requests the Court to enter judgment in its favor and against Singular as follows:

- a. For a judgment dismissing Singular's Amended Complaint against Google with prejudice; and
- b. For a judgment that the Patents-in-Suit, and every asserted claim thereof, are not infringed, invalid, and unenforceable;
- c. For an order that Google is the "prevailing party" with respect to Singular's patent claims and that this case is "exceptional" within the meaning of 35 U.S.C. § 285, and for an award granting Google its reasonable attorney's fees and costs, as permitted by law or equity;
- d. A judgment limiting or barring Plaintiff's ability to enforce the Patents-in-Suit in equity;
- e. Such other and further relief as this Court may deem just and proper.

**JURY DEMAND**

Google hereby demands a jury trial for all issues so triable.

Respectfully submitted,

Dated: July 9, 2020

By: /s/ Gregory S. Corbett  
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**CERTIFICATE OF SERVICE**

I certify that this document is being filed through the Court's electronic filing system, which serves counsel for other parties who are registered participants as identified on the Notice of Electronic Filing (NEF). Any counsel for other parties who are not registered participants are being served by first class mail on the date of electronic filing.

Date: July 9, 2020

*/s/ Gregory F. Corbett*

Gregory F. Corbett